WHAT IS CLAIMED IS:

1. A data storage system, comprising:

at least one storing location in which a memory device is received while the memory device is not supplied with an electric power;

at least one docking location where the memory device is supplied with the electric power so that data can be stored in the memory device and retrieved from the memory device; and

a transport device for transporting the memory device between the shelf and the docking location.

2. The data storage system of claim 1, further comprising a system controller for controlling the transport device.

3. The data storage system of claim 1, further comprising a second memory for recording information relating to the memory device in which the second memory is attached.

4. The data storage system of claim 1, further comprising one or more storage docking locations (SDLs) allowing for the mechanical and electrical interconnection of the storage element with the active interface translation module, wherein each of the storage docking locations (SDLs)

allows for power up and power down of the storage element and reading of a secondly memory parametric data of the memory device.

5.   A data storage system, comprising:

at least one storage location for receiving a memory device; and

a switching station for causing an electrical interconnection for data transmission and power control of the memory device to the system controller.

6.   A data storage system, comprising:

one or more memory devices;

a system controller each connected with the memory devices through respective first switches for data transmission;

a power source each connected with the memory devices through a second switch; and

a switching controller for switching on and off the first and second switches.

7.   The data storage system of claims 1, 5 or 6, wherein the power of the memory devices is switched on and off in conjunction with a switching controller to lengthen the life span of the memory device as well as reduce the overall system power consumption.

8.   The data storage system of claims 1, 5 or 6, further comprising an active interface translation element (AIT) which provides logical switching and electrical switching of data interfaces from the storage docking location or switching station through a virtual drive logical element to a host interface element.

9.   The data storage system of claims 1, 5 or 6, wherein the active interface translation element (AIT) includes a virtual drive element which creates the appearance of a logical disk drive element to the host server system through a host interface element without any specific storage element being attached.

10.   The data storage system of claims 1, 5 or 6, wherein the active interface translation element (AIT) includes one or more host interface modules (HIM) which are the same as or different from that of the storage docking location (SDL) for the purpose of a communication to one or more storage elements.

11.   The data storage system of claims 1,5 or 6, wherein the active interface translation element (AIT) includes a storage mapping module for a logical mapping and translation of data from the virtual drive element logical representation of blocked data organization to that of one or more storage elements blocked data organization, wherein the logical mapping and translation is dynamically defined based on stored parametric data associated

with the storage elements container.

12.   The data storage system of claims 1, 5 or 6, wherein the AIT element includes a maintenance storage module (MSM) providing monitoring both active and inactive storage element parametric data for the purpose of predicting and executing RAD/ADM system operations required to minimize data loss within the storage elements, wherein a minimization of data includes a migration of data from one storage element to another at predetermined error rate points and wherein the maintenance storage module (MSM) module executes RAD/ADM system operations required to maintain mechanical integrity of the storage elements.

13.   The data storage system of claims 1, 5 or 6, wherein the active interface translation (AIT) element includes a system mapping module (SMM) element which modifies the normal storage element responses between the storage element and the host interface module (HIM) as having removable media which can be injected/ejected.